

CLEAN VERSION OF THE AMENDED CLAIMS

1. (Currently Amended) A method of controlling the coupling of multi-platform reservoir and network simulators comprising:
 - synchronizing the advancement through time of the reservoir and network simulators executing on a computer;
 - translating each of a plurality of hydrocarbon fluid streams to a common fluid model of a controller by converting pseudo components of each of the plurality of hydrocarbon fluid streams to a super-set of pseudo-components used in the reservoir and network simulators executing on the computer; and
 - performing a production operation based on simulations of the reservoir and network simulators of a reservoir, the simulations performed using the converted hydrocarbon fluid streams.
2. (Currently Amended) A controller for coupling multi-platform reservoir and network simulators comprising:
 - means for synchronizing the advancement through time of the reservoir and network simulators;
 - means for translating each of a plurality of hydrocarbon fluid streams to a common fluid model of the controller by converting pseudo components of each of the plurality of hydrocarbon fluid streams to a super-set of pseudo-components used in the reservoir and network simulators; and
 - means for performing a production operation based on simulations of the reservoir and network simulators of a reservoir, the simulations performed using the converted hydrocarbon fluid streams.
3. (Currently Amended) The controller of claim 2 additionally comprising means for apportioning global production and injection constraints between simulation tasks of the reservoir and network simulators.
4. (Original) The controller of claim 3 additionally comprising means for balancing reservoir and surface networks.

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5. (Canceled)

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